



General Medicine:
ALLERGIC REACTION
Medical Protocol

Patient Care Goals:

1. Provide timely therapy for potentially life-threatening reactions to known or suspected allergens to prevent cardiorespiratory collapse and shock
2. Understand anaphylaxis is a spectrum disorder from mild to deadly symptoms; epinephrine is the life saving intervention; others are adjunctive.

Patient Presentation:

Inclusion Criteria

All ages with suspected allergic reactions even if they received an epi dose prior to arrival.

Quality Improvement:

Key Documentation Elements

1. Time to epinephrine

Patient Safety Considerations:

1. Patients at high risk of death include:
 - Delayed epinephrine use
 - Received 2 total doses of epi
 - History of asthma
 - Patient on beta blockers
 - Inadequate resolution of symptoms
2. Cardiovascular collapse can be sudden and difficult to predict; hives/rash are not always present so do not rely on these findings if absent.

Paramedic Working Assessment: Allergic Reaction

Universal Care

Any one of these with system findings with suspicion of allergic reaction:

- **Mouth/Upper Airway:** itching, sensation of swelling to lips/tongue/uvula/throat, hoarse voice, tightness, stridor, difficulty swallowing
- **Lungs:** cough, shortness of breath, wheezing
- **Cardiovascular:** hypotension, dizziness, faint pulse, syncope, feeling of doom
- **GI:** vomiting, cramping
- **Skin:** pallor, itching, hives, erythema

Epinephrine 1:1000 IM
• 0.3 mg if 30 kg or over
• 0.15 mg if under 30 kg
Repeat in 5 minutes if no improvement

Plus
Adjunctive
therapy

Dexamethasone 0.5 mg/kg
Max dose of 16 mg

SBP < 90 (or age defined criteria) or other shock criteria

Normal Saline **Bolus** 20 mL/kg

Diphenhydramine 1 mg/kg IM, IV, IO
Max of 25 mg

Plus any of these for special PRN circumstances

Shock continues

Norepinephrine Infusion
PLUS
Normal Saline **Bolus**

- Albuterol 5 mg / Ipratropium 0.5 mg nebulized – PRN
Wheezing
- Glucagon 1mg IM/IV/IN – PRN
Patients on beta blockers
- Epinephrine 1:1000 5 mg adult (2.5 mg if <40kg) nebulized – PRN
Stridor